

Tdap

Tetanus-Diphtheria- Acellular Pertussis Combined Vaccine

Revision Date: May 6, 2024

Rationale for Update:

- References to dTap changed to Tdap to align with national standards.

Please consult the Product Monograph for further information about the vaccine.		
	ADACEL®	BOOSTRIX®
Manufacturer	Sanofi Pasteur Limited	GlaxoSmithKline Inc.
Licensed use	Booster immunization for individuals four years of age and older. ^(1,2)	
Off-license use	Primary immunization for individuals 7 – 17 years of age. ⁽³⁾	
Indications for use of provincially funded vaccine	<p>Children 7 years up to including 17 years of age including:</p> <ul style="list-style-type: none">Children initiating (unknown/uncertain or no history of a primary series) or completing a primary vaccine series.⁽³⁾ <p>Note: If polio vaccine is also indicated, diphtheria, tetanus, acellular pertussis and polio combined vaccine (Tdap-IPV) should be used.</p> <ul style="list-style-type: none">Grade 9 students reinforcing doses: routine immunization program.Children who sustain a wound injury and have not received the age-appropriate number of tetanus vaccine doses. See Tetanus Post-exposure Prophylaxis in Injury/Wound Management. <p>Adults 18 years of age and older including:</p> <ul style="list-style-type: none">Individuals initiating (unknown/uncertain or no history of a primary series) or completing a primary vaccine series of tetanus and/or diphtheria.⁽³⁾Individuals presenting for a reinforcing dose of tetanus and/or diphtheria vaccine.⁽³⁾Individuals presenting for a first dose of pertussis containing vaccine.Healthcare workers/health care students with no documented history of a dose of acellular pertussis vaccine as an adult.Adults who sustain a wound injury and need to have their tetanus immunization history assessed. See Tetanus Post-exposure Prophylaxis in Injury/Wound Management. <p>Note: If polio vaccine is also indicated, diphtheria, tetanus, acellular pertussis and polio combined vaccine (Tdap-IPV) should be used.</p> <ul style="list-style-type: none">Candidates or recipients of solid organ transplantation (SOT). See Immunization for Adult Solid Organ Transplant Recipients.	

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	<p>Pregnant individuals</p> <ul style="list-style-type: none"> • Pregnant women in every pregnancy from 27 weeks up to and including 32 weeks gestation.^(3,4) <ul style="list-style-type: none"> ➤ One dose of Tdap should be offered in every pregnancy ideally from 27 weeks up to and including 32 weeks gestation irrespective of immunization history. ➤ Tdap may, however, be provided from 13 weeks gestation up to the time of delivery.⁽⁴⁾ ➤ If Tdap was provided early in pregnancy (e.g. prior to recognition of pregnancy), it is not necessary to re-immunize for this pregnancy.⁽⁴⁾ <p>Notes:</p> <ul style="list-style-type: none"> • Hematopoietic stem cell transplant recipients (HSCT). See Immunization for Child Hematopoietic Stem Cell Transplant Recipients and Immunization for Adult Hematopoietic Stem Cell Transplant Recipients. • Adults who are in contact or anticipating contact with infants (e.g., parents/guardians, grandparents, childcare providers) should be prioritized to receive one dose in adulthood (18 years of age and older).⁽³⁾ • Close contacts (e.g. household, classroom) of a diphtheria case should receive a dose of a diphtheria toxoid-containing vaccine as appropriate for age unless the contact is known to have been fully immunized for age and the last dose of diphtheria toxoid-containing vaccine was given within 10 years. The diphtheria toxoid-containing vaccine series should be completed for previously unimmunized or incompletely immunized contacts.⁽³⁾ <p>For disease investigation, contact assessment and reporting requirements, refer to Public Health Notifiable Disease Guidelines – Diphtheria.⁽⁵⁾</p> <ul style="list-style-type: none"> • Carriers of diphtheria if not previously immunized and those of unknown immunization status, should receive immunization promptly and ensure completion of vaccine series.⁽⁶⁾ If a carrier has been immunized previously but has not received a booster of diphtheria toxoid within 10 years, a booster dose of a diphtheria toxoid-containing vaccine should be given.⁽³⁾ • Infection with diphtheria does not necessarily confer immunity; therefore, immunization should be given during convalescence from diphtheria disease.⁽⁶⁾
Dose	0.5mL ^(1,2)
Route	Intramuscular injection ^(1,2)
Schedule	<p><u>Children 7 years up to and including 17 years of age</u>⁽³⁾</p> <p>Primary Series:</p> <ul style="list-style-type: none"> ❖ Dose 1: day 0 ❖ Dose 2: 4 – 8 weeks after dose 1 ❖ Dose 3: 6 – 12 months after dose 2 <p>Reinforcing dose:</p> <ul style="list-style-type: none"> ❖ Grade 9 students or other children (12-17 years of age) when a reinforcing dose is indicated.⁽³⁾

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	<p><u>Adults 18 years of age and older</u></p> <p>Primary Series for unimmunized adults:⁽³⁾</p> <ul style="list-style-type: none"> ❖ Dose 1: day 0 ❖ Dose 2: 4 – 8 weeks after dose 1 ❖ Dose 3: 6 – 12 months after dose 2 <p>Reinforcing dose:</p> <ul style="list-style-type: none"> ❖ Every 10 years <p>In addition:</p> <ul style="list-style-type: none"> ❖ One dose of as an adult for those who have not previously received a pertussis-containing vaccine. <p><u>Pregnant individuals</u></p> <ul style="list-style-type: none"> ❖ One dose of Tdap should be offered in every pregnancy from 27 weeks up to and including 32 weeks gestation irrespective of immunization history.⁽⁴⁾ <ul style="list-style-type: none"> ○ Tdap may, however, be provided from 13 weeks gestation up to the time of delivery.⁽⁴⁾ ○ If Tdap was provided early in pregnancy (e.g. prior to recognition of pregnancy), it is not necessary to re-immunize after 13 weeks of gestation.⁽⁴⁾ <p>Notes:</p> <ul style="list-style-type: none"> • Students, who have received a dose of Td prior to the Grade 9 booster, should receive a dose of Tdap regardless of the interval since the previous Td dose.⁽⁷⁾ • Students, who have received a dose of Tdap at 12 years of age or older, do not require the routine booster in Grade 9.^(7,8) Students who received a booster at age 12 or older also do not immediately require an adult dose of Tdap at 18 years of age. <ul style="list-style-type: none"> - Another Tdap dose can be offered at the regular 10 year interval, unless a dose is recommended sooner for pregnancy or a wound injury (see Tetanus Post-exposure Prophylaxis in Injury/Wound Management). • Eligible Grade 9 students, who missed the booster (Tdap) in Grade 9, should receive the vaccine if they present to public health. • Adults presenting for a first dose of pertussis-containing vaccine do not need to wait 10 years from their last dose of tetanus-containing vaccine to receive their Tdap dose. • Candidates and recipients of solid organ transplantation seven years of age and older. See Immunization for Children Expecting Solid Organ Transplant after 18 Months of Age (Catch-up Schedule) and Immunization for Adult Solid Organ Candidates and Recipients.
<p>Contraindications</p>	<ul style="list-style-type: none"> • Known severe hypersensitivity to any component of the vaccine.^(1,2) • Anaphylactic or other allergic reaction to a previous dose of vaccine containing tetanus, diphtheria or pertussis antibodies. ^(1,2) • Encephalopathy of unknown etiology, occurring within 7 days following previous vaccination with pertussis containing vaccine.^(1,2)

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Precautions	<ul style="list-style-type: none"> Frequent booster doses of tetanus and diphtheria toxoids may lead to severe local and systemic reactions and may be associated with high levels of circulating antitoxin.⁽³⁾
Pregnancy	Immunization with Tdap has been shown to be safe in pregnant women and allows high levels of antibody to be transferred in utero that are protective to newborns during the first two months of life when the morbidity and mortality from pertussis infection is highest. ⁽³⁾
Lactation	Breastfeeding women who are due for the vaccine may be safely immunized. ⁽³⁾
Program Notes	<ul style="list-style-type: none"> September 1, 2004 – dTap replaced Td as routine grade 9 booster February 2, 2009 – One lifetime dose of dTap vaccine recommended for individuals 65 years of age and older when presenting for Td booster. January 1, 2012 – dTap one-time adult booster dose replacing Td (not needed if dTap at age 12 years or older). February 1, 2012 – dTap was implemented for the following adult population: <ul style="list-style-type: none"> HCWs providing care to children under 12 months of age. Adults who have not received an adolescent or adult dose of dTap vaccine. March 2, 2014 – dTap given as a one-time adult booster dose replacing Td if have not already received dose of dTap in adulthood. January 1, 2019 – dTap offered in every pregnancy. (through public health or pharmacy). April 20, 2022 - Note added for adults when polio vaccine is also indicated; diphtheria, tetanus, acellular pertussis and polio combined vaccine (dTap-IPV) should be used. June 30, 2022 – Updated to reflect the replacement of Td product (no longer available in Alberta as of June 30, 2022) with dTap. August 10, 2022 – Updated to clarify indications for health care workers and health care students. May 6, 2024 - References to dTap changed to Tdap to align with national standards. <p>Historical Notes:</p> <ul style="list-style-type: none"> 1930-1994 August 1 – Diphtheria toxoid became available. 1947 January 1 – 2000 December 31 – Tetanus toxoid became available.

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References

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